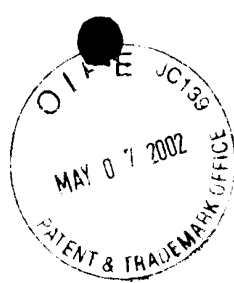


03500.016239



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
TAKESHI IMAMURA ET AL.) Examiner: Unassigned
Application No.: 10/084,172) Group Art Unit: Unassigned
Filed: February 28, 2002)
For: NOVEL POLYHYDROXYALKANOATE)
CONTAINING UNIT WITH PHENYL-)
SULFANYL STRUCTURE IN THE SIDE)
CHAIN, PROCESS FOR ITS PRO-)
DUCTION, CHARGE CONTROL)
AGENT, TONER BINDER AND TONER)
WHICH CONTAIN NOVEL POLY-)
HYDROXYALKANOATE, AND IMAGE-)
FORMING METHOD AND IMAGE-)
FORMING APPARATUS WHICH MAKE)
USE OF THE TONER) May 6, 2002

Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed Form PTO-1449. Copies of the listed documents are also enclosed.

The concise explanation of relevance for the non-English documents is found in the Specification where they are cited, in an abstract, if attached and in corresponding U.S. patent, if provided.

CONCLUSION

It is respectfully requested that the above information be considered by the Examiner and that a copy of the enclosed Form PTO-1449 be returned indicating that such information has been considered.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

Peter Saxon

Attorney for Applicants

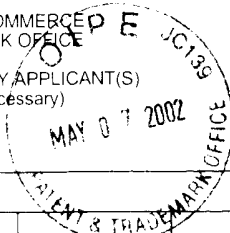
Registration No. _____

24947

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

256486v1

| | | | | | | |
|---|--|--|---|--|--------------------------------------|--|
| FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) | | | ATTY DOCKET NO. 03500.016239 | | APPLICATION NO. 10/084,172 | |
| APPLICANT TAKESHI IMAMURA ET AL. | | | FILING DATE FEBRUARY 28, 2002 | | GROUP UNASSIGNED | |



| U.S. PATENT DOCUMENTS | | | | | | | |
|-----------------------|-----------------|-------|------------------|-------|----------|----------------------------|--|
| EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE | |
| | 4383167 | 7/83 | Holmes, et al. | 525 | 64 | | |
| | 4442189 | 4/84 | Lu, et al. | 430 | 45 | | |
| | 4480021 | 10/84 | Lu, et al. | 430 | 106.6 | | |
| | 4795690 | 1/89 | Shindo, et al. | 430 | 109 | | |
| | 4876331 | 10/89 | Doi | 528 | 361 | | |
| | 4925765 | 5/90 | Madeleine | 430 | 110 | | |
| | 5004664 | 4/91 | Fuller, et al. | 430 | 106.6 | | |
| | 5135859 | 8/92 | Witholt et al. | 435 | 135 | | |
| | 5200332 | 4/93 | Yamane, et al. | 435 | 135 | | |
| | 5292860 | 3/94 | Shiotani, et al. | 528 | 361 | | |
| | 5612161 | 3/97 | Watanabe, et al. | 430 | 110 | | |
| | 5667927 | 9/97 | Kubota, et al. | 430 | 109 | | |

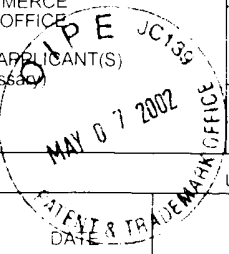
| FOREIGN PATENT DOCUMENTS | | | | | | | |
|--------------------------|-----------------|------|---------|-------|----------|---------------------------------|--|
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES/NO/ OR ABSTRACT | |
| | JP 60-108861 | 6/85 | Japan | | | Abstract | |
| | JP 61-3149 | 1/86 | Japan | | | Abstract | |

| OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) | |
|--|--|
| | Park, et al., "Epoxidation of Bacterial Polyesters with Unsaturated Side Chains. I. Production and Epoxidation of Polyesters from 10-Undecenoic Acid; Macromolecules, <u>31</u> , 5 1480-1486. |
| | Park, et al., "Epoxidation of Bacterial Polyesters with Unsaturated Side Chains. II. Rate of Epoxidation and Polymer Properties; J. Polym. Sci; Part A; Polym. Chem. <u>36</u> , 2381-2387 (1998). |
| | Aróstegui, et al., "Bacterial Polyesters Produced by Pseudomonas oleovorans Containing Nitrophenyl Groups"; Macromolecules, <u>32</u> , 9, 2889-2895 (1999). |

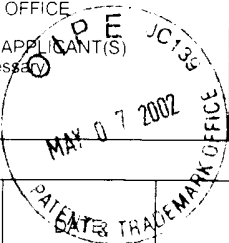
| | |
|----------|-----------------|
| EXAMINER | DATE CONSIDERED |
|----------|-----------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 1 of 3

| | | | | | | | |
|---|----|---|--|-----------------|--------------------------------------|----------|---------------------------------------|
| FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) | | | ATTY DOCKET NO. 03500.016239 | | APPLICATION NO. 10/084,172 | | |
|  | | | APPLICANT TAKESHI IMAMURA ET AL. | | | | |
| | | | FILING DATE FEBRUARY 28, 2002 | | GROUP UNASSIGNED | | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | | | | | | | |
| | | | | | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES/NO/ OR ABSTRACT |
| | JP | 63-38958 | 2/88 | Japan | | | Abstract & USP 4795690 |
| | JP | 63-88564 | 4/88 | Japan | | | Abstract |
| | JP | 2642937 | 8/97 | Japan | | | Abstract |
| | JP | 5-7492 | 1/93 | Japan | | | Abstract & USP 5200332 |
| | JP | 5-93049 | 4/93 | Japan | | | Abstract & USP 5292860 |
| | JP | 6-15604 | 3/94 | Japan | | | Abstract & USP 4393167 |
| | JP | 6-289644 | 10/94 | Japan | | | Abstract |
| | JP | 7-72658 | 3/95 | Japan | | | Abstract |
| | JP | 7-120975 | 5/95 | Japan | | | Abstract & USP 5667927 |
| | JP | 7-14352 | 2/95 | Japan | | | Abstract & USP 4876331 |
| | JP | 7-265065 | 10/95 | Japan | | | Abstract |
| | JP | 8-19227 | 2/96 | Japan | | | Abstract & USP 4876331 |
| OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | |
| | | Takagi, et al., "Biosynthesis of Polyhydroxyalkanoate with a Thiophenoxy Side Group Obtained from <i>Pseudomonas putida</i> ; Macromolecules, 32, 25, 8315-8318 (1999). | | | | | |
| | | Fritzche, et al., "An Unusual Bacterial Polyester with a Phenyl Pendant Group"; Makromol. Chem. 191, 1957-1965 (1990). | | | | | |
| EXAMINER | | | | DATE CONSIDERED | | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

| | | | | | | | |
|--|----|--|-------|--|-------|-------------------------------------|---|
| FORM PTO 449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) | | | | ATTY DOCKET NO 03500.016239 | | APPLICATION NO 10/084,172 | |
|  | | | | APPLICANT TAKESHI IMAMURA ET AL. | | | |
| | | | | FILING DATE FEBRUARY 28, 2002 | | GROUP UNASSIGNED | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER INITIAL | | DOCUMENT NUMBER | | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES/NO/ OR ABSTRACT |
| | JP | 8-179564 | 7/96 | Japan | | | Abstract & USP 5612161 |
| | JP | 8-262796 | 10/96 | Japan | | | Abstract |
| | JP | 2623684 | 6/97 | Japan | | | Abstract |
| | JP | 9-191893 | 7/97 | Japan | | | Abstract |
| | JP | 9-274355 | 10/97 | Japan | | | Abstract |
| | JP | 9-281746 | 10/97 | Japan | | | Abstract |
| | JP | 2807795 | 10/98 | Japan | | | Abstract |
| | JP | 2989175 | 12/99 | Japan | | | Abstract |
| | JP | 2001- 178484 | 7/01 | Japan | | | Abstract |
| OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | |
| | | Kim, et al., "Preparation and Characterization of Poly(β)-hydroxyalkanoates) Obtained from <u>Pseudomonas oleovorans</u> Grown with Mixtures of 5-Phenylvaleric Acid and n-Alkanoic Acids"; <u>Macromolecules</u> , 24 , 5256-5260 (1991). | | | | | |
| | | Lytle, et al., "Filtration Sizes of Human Immunodeficiency Virus Type 1 and Surrogate Viruses Used To Barrier Materials"; <u>Appl. & Environ. Microbiol.</u> , 58 , 2, 747-749 (1992). | | | | | |
| | | Ritter, et al., "Bacterial Production of Polyesters Bearing Phenoxy Groups in the Side Chains, 1 Poly(3)-hydroxy-5-pnenoxypentanoate-co-3-hydroxy-9-phenoxy-nonanoate) from <u>Pseudomonas oleovorans</u> "; <u>Macrol. Chem. Phys.</u> , 195 , 1665-1672 (1994). | | | | | |
| | | Gross, et al., "Cyanophenoxy-Containing Microbial Polyesters: Structural Analysis, Thermal Properties, Second Harmonic Generation and In-Vivo Biodegradability"; <u>Polymer Int'l.</u> , 39 , 205-213 (1996). | | | | | |
| | | Curley, et al., "Production of Poly(3-hydroxyalkanoates) Containing Aromatic Substituents by <u>Pseudomonas oleovorans</u> ; <u>Macromolecules</u> , 29 , 1762-1766 (1996). | | | | | |
| EXAMINER | | | | DATE CONSIDERED | | | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 3 of 3